TOWN OF GRAND ISLE HURRICANE LEVEE AND BEACH NOURISHMENT PROJECT

FEBRUARY 22, 2005

T. Baker Smith & Son, Inc.
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Grand Isle
Hurricane Levee and Beach Repair Project

State Project Number 502-26-0075

Item	Cost
Crosswalks	$75,000.00
Levee Repair Work	$528,500.00
Beach Sand	$2,809,050.00
Seeding and Fertilizing	$30,000.00
TOTAL	$3,442,550.00

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DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT DOTD

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PLANNING - DESIGN - CONSTRUCTION MANAGEMENT - OPERATIONS COMPLIANCE
SURVEYING - ENGINEERING - ENVIRONMENTAL SERVICES
(985) 868-1050 www.tbsmith.com

WEEKS MARINE

Grand Isle Beach Nourishment Project

- Cleared down to existing clay core.
- Sink-hole cleared of sand and filled with clay.

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- Clearing down to existing clay core at STA 209+77.
- Clearing and re-building done in 100’ sections

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- Hauled in clay built to a +9.0’ EL down to a +3.0’ EL.
- 4’ on 1’ slope.

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- 6’ wide key-way being excavated down to a +2.0’ EL to allow for installation of graded stone.

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- Fabric applied to beach side of levee from crown to toe.
- Ready for installation of graded stone.

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- 250 lb class graded stone being applied from key-way working up to the crown.

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- Protected side of levee backfilled with excavated sand.
- Shaped and graded to specifications leaving a 3’ wide crown of existing clay.

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- Graded stone placed on beach side of levee to specifications.
- Levee is now prepared for additional pumped sand to be placed and built up to a +12.0’ EL.

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- Entire levee will be capped with excavated sand.
- Top of sand material will be built to a +12.0’ El.
- Crown of levee will be 10’ wide at a 5’ on 1’ slope.

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- Week's Marine's "Tom James"
- 30" Suction Dredge
- Began pumping material at 8:00 a.m. on Tuesday, January 11, 2005.
- Finished on Sunday, February 13, 2005

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- Survey Crew boats take personnel to and from the dredge daily.
- Survey Crew boats continuously take after dredge surveys of the borrow pit area.

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- Inside the cockpit, 3 operators work alternating 8 hour shifts.
- Computer screens show the operator the exact location and depth of the dredge's cutter head.

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- Inside the engine room, this 6000 hp, 16 cylinder diesel engine turns the cutter head at a steady 375 rpm’s.
- The engine typically burns between 10-20,000 gallons of fuel per day.

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- All electrical on board is run by the generator house.
- These generators provide enough power to the dredge to run a large town.

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- The dredge's cutter head is equipped with sharp teeth-like blades capable of cutting through any sub-surface condition.

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- On the beach, the large discharges pipes are set.
- As the material fluid exits the pipe, the sand slowly settles out of the fluid.

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- A splitter is set to allow two outlets of discharged material and slow the velocity of flow.

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- Bulldozers work the settled material building containment dykes and capping the levee.

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- Containment dykes are built out to the edges of the project template to help retain as much material as possible.

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- Sand is pushed up the levee at a 5’ on 1’ slope or greater up to a +12.0’ elevation.

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Grand Isle Beach Nourishment Project

Before

After

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Grand Isle Beach Nourishment Project

Before

After

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Grand Isle Beach Nourishment Project

Before Picture

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After Picture

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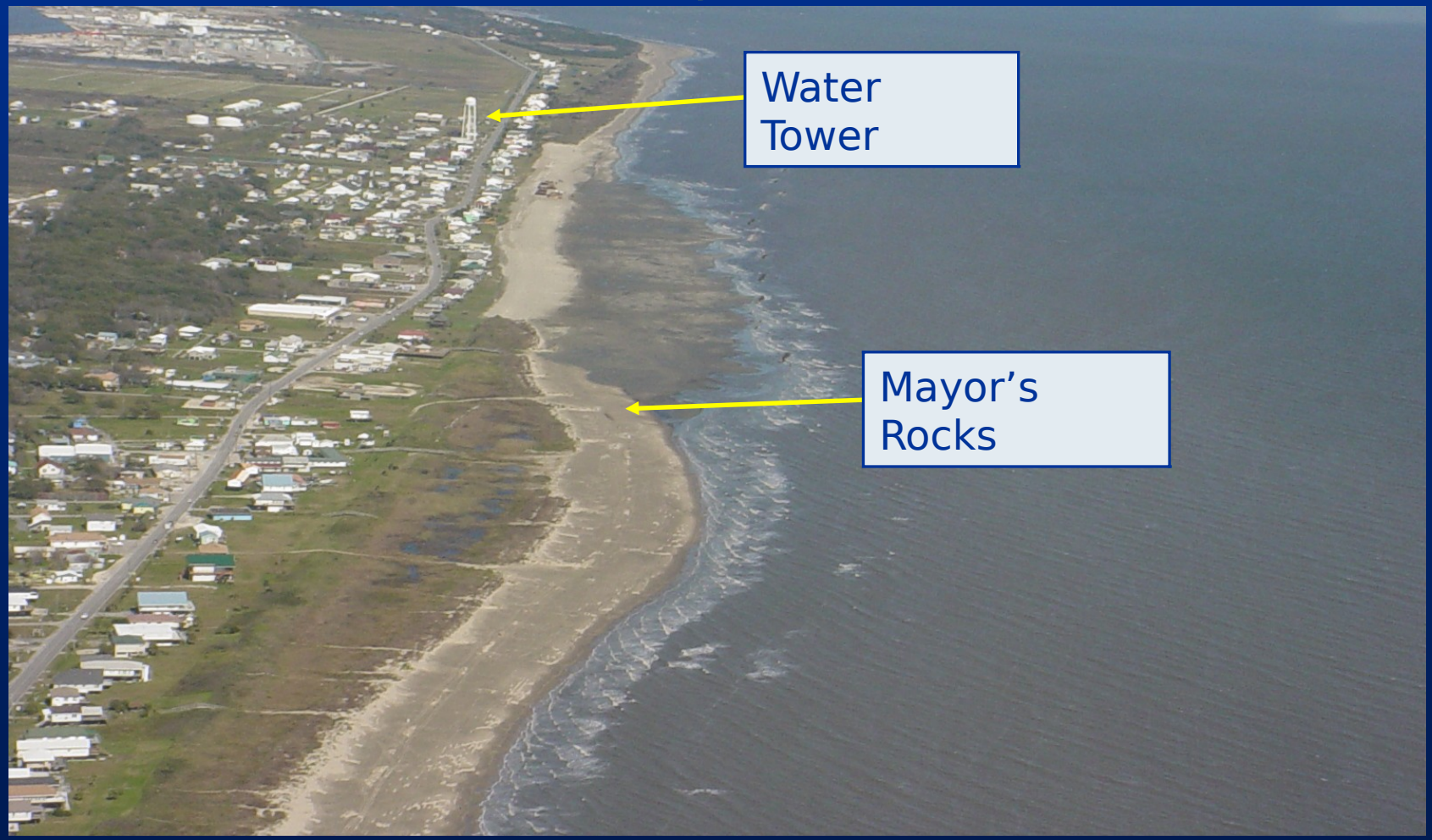

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